

13B3



651284



December 26, 2002

Mr. Frank Faranca
Case Manager
NJDEP
Division of Responsible Party Site Remediation
Bureau of Federal Case Management
CN 028
Trenton, NJ 08625-0028

RE: NJPDES-DGW Permit 0086487 Effective March 1, 2000

Dear Mr. Faranca:

Two copies of the Discharge to Groundwater Report consisting of one (1) T-VWX-014, seven (7) VWX-015 Groundwater Analysis – Monitoring Well reports and report Sections 1.0 through 8.0 for the October through December 2002 quarter are enclosed.

Detection Monitoring was performed in accordance with Part 4-DGW Table 2, using the Ground Water Sampling and Analysis Plan approved in April 1996.

Lenox inspection logs were reviewed and a summary of the logs for the quarter is enclosed.

The “Mann-Whitney U-Test” statistical analysis of the ground water TCE results from the five (5) sentinel wells over eight (8) sampling quarters was rolled forward twelve (12) quarters to cover the October 2002 data and is included in section 7 of the report. The null-hypothesis is accepted for sentinel wells MW-75, MW-78 and MW-79A and we cannot statistically conclude that the TCE concentrations are decreasing for the twelfth quarter’s data set. The null-hypothesis is **not accepted** for sentinel wells MW-76, MW-77 and we can statistically conclude that the TCE concentrations are decreasing for the twelfth quarter’s data set. In addition, MW-75 has been non-detect for the past thirteen consecutive quarters respectively.

The **bold** data in the tables denotes elevated results, which exceed the site-specific GWQC’s for lead (10ug/l) and zinc (36.7 ug/l) as determined by calculating their arithmetic means from data reported in a 3-year study. Trichloroethylene levels are compared to the New Jersey limit of 1.0 ppb. Please note:

- MW-3 continues to show elevated lead and zinc, as has been historically noted;
- MW-72 and MW-74 were less than the laboratory detection limit for dissolved lead this quarter. MW-73 dissolved lead was slightly greater than the lead detection limit. MW-72, MW-73 and MW-74 showed elevated total lead. NOTE: that background monitoring well MW-3F showed elevated total lead at 18.2 mg/L.

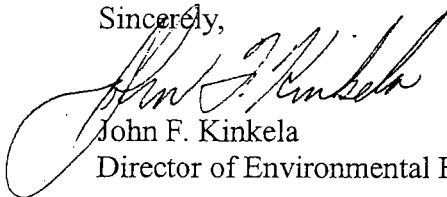
Mr. Frank Faranca
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Re: NJPDES-DGW Permit 0086487 Effective March 1, 2000

- MW-3, MW-4, MW-17, MW-25, and B-31 showed elevated levels of both total and dissolved zinc, while MW-73 and MW-74 showed only elevated total zinc;
- Of the fifteen (15) wells sampled for TCE this quarter, two (2), MW-10 and B-31, were higher than the last quarter. Eight (8) wells decreased, MW-12S, MW-15, MW-25, B-59, and MW-77, MW-78, MW-79A and MW-81. Five (5) wells, MW-1, MW-13, MW-75, MW-76, and MW-80, remained the same – all non-detect;
- TCE was elevated in three (3) of the five (5) downgradient sentinel wells, MW-77, MW-78, and MW-79A. These (3) sentinel wells all decreased;
- The volatile organic compound cis-1,2-dichloroethene was detected in, MW-10 and MW-79A. TCE daughter species were not detected in any other wells.
- The Monthly Daily Average Flows for the quarter were 351,070 gallons per day for September, 355,249 gallons per day for October and 347,216 gallons per day for November 2002;
- GAC Treatment System influent, mid effluent, filtered and unfiltered, water samples contained elevated zinc (at 90, 20 and 80 ug/L – filtered – and 190, 20 and 110 ug/L – unfiltered - - respectively). The zinc is attributed to the higher zinc levels previously observed in B-31 and other wells;
- Lead was detected in the GAC Treatment System unfiltered, influent sample at 2 ug/L and the filtered, influent sample at 1 ug/L. Lead was not detected in the filtered or unfiltered, mid and effluent water samples;
- The GAC treatment system was last rebedded on July 23, 2002.

Please call (609) 965-8272 if there are any questions.

Sincerely,



John F. Kinkela
Director of Environmental Engineering

Enclosures -Pomona DGW and TCE Quarterly Groundwater Monitoring Report – October 2002 Monitoring Round
 -Summary of Inspection Logs – October through December 2002 Quarter

bcc: J.H. Ennis (w/attachments)
L.A. Fantin, Lenox (w/attachments)
~~CAndrewPark-(w/attachments)~~
File

2.0 DETECTION MONITORING PROGRAM (DGW)

The quarterly detection monitoring program is covered by the GWSAP and consists of the following for the fourth quarter:

- Sample monitoring wells MW-1, MW-3, MW-4, MW-6, MW-9 and MW-10.
- Analyze all samples for color and total and dissolved lead and zinc. Samples from MW-1 and MW-10 are also analyzed for total dissolved solids (TDS), total suspended solids (TSS), and total and dissolved iron.
- Specific conductivity, pH, temperature and dissolved oxygen are measured in the field during purging and prior to sample collection.

The groundwater analytical data is summarized in Tables 1 through 7, Section 2. Table 1 summarizes the results of the current sampling event. The full laboratory data report is provided in Appendix C. Tables 2 through 7 summarize historical sampling results for each well since 1994.

The October 2002 detection monitoring results are summarized below:

- Dissolved lead concentrations ranged from less than the laboratory reporting limit of 3.0 micrograms per liter ($\mu\text{g/l}$) to 21.4 $\mu\text{g/l}$, with the highest concentration in the sample from well MW-3. Total lead concentrations ranged from less than the laboratory reporting limit of 3.0 $\mu\text{g/l}$ to 20.2 $\mu\text{g/l}$, with the highest concentration also in the sample from MW-3.
- Dissolved zinc concentrations ranged from less than the laboratory reporting limit of 20 $\mu\text{g/l}$ to 8,560 $\mu\text{g/l}$, with the highest concentration in the sample from well MW-3. Total zinc concentrations ranged from less than the laboratory reporting limit of 20 $\mu\text{g/l}$ to 8,580 $\mu\text{g/l}$, with the highest concentration also in the sample from MW-3.

- Iron concentrations were analyzed only in the samples from MW-1 and MW-10. Dissolved iron was detected in the sample from MW-1 at a concentration of 114 $\mu\text{g/l}$. Dissolved iron was not detected in the sample from MW-10 at a concentration exceeding the 100 $\mu\text{g/l}$ laboratory reporting limit. Total iron was detected in MW-1 and MW-10 at concentrations of 115 $\mu\text{g/l}$ and 139 $\mu\text{g/l}$, respectively.
- TDS concentrations were 83 milligrams per liter (mg/l) in MW-1 and 165 mg/l in MW-10. TSS concentrations did not exceed the 4.0 mg/l laboratory reporting limit in either MW-1 or MW-10.
- Color concentrations were less than 5 color units for all samples.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Form T-VWX-14

MONITORING REPORT - TRANSMITTAL SHEET

NJPDES No.

0086487

REPORTING PERIOD

MO YR MO YR

1002 thru 1202

PERMITEE:

Name LENOX INCORPORATED

Address 100 LENOX DRIVE

LAWRENCEVILLE, NEW JERSEY 08648

FACILITY:

Name LENOX CHINA, A DIVISION OF LENOX INCORPORATED

Address TILTON ROAD

POMONA, NEW JERSEY 08240

(County) ATLANTIC

Telephone (609) 965-8272

FORMS ATTACHED (Indicate Quantity of Each)

SLUDGE REPORTS - SANITARY

☐ T-VWX-007 ☐ T-VWX-008 ☐ T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

☐ T-VWX-010A ☐ T-VWX-010B

WASTEWATER REPORTS

☐ T-VWX-011 ☐ T-VWX-012 ☐ T-VWX-013A

GROUNDWATER REPORTS (As per permit)

☒ VWX-015 ☐ VWX-016 ☐ VWX-017

NJPDES DISCHARGE MONITORING REPORT

☐ EPA FORM 3320-01

OPERATING EXCEPTIONS

YES NO

DYE TESTING

☐ ☐

TEMPORARY BYPASSING

☐ ☐

DISINFECTION INTERRUPTION

☐ ☐

MONITORING MALFUNCTIONS

☐ ☐

UNITS OUT OF OPERATION

☐ ☐

OTHER

☐ ☐

(Detail any "yes" on reverse side
in appropriate space.)

AUTHENTICATION -

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

PRINCIPAL EXECUTIVE OFFICER or
DULY AUTHORIZED REPRESENTATIVE

LICENSED OPERATOR

Name _____

Name JOHN F. KINKELA

Grade & Registry No. _____

Title DIR. OF ENVIRONMENTAL ENGINEERING

Signature _____

Signature *John F. Kinkela* 12-26-02

**LENOX CHINA FACILITY AND ADJACENT AREA
POMONA, NEW JERSEY**

TABLE 1 SECTION 5

SUMMARY OF TCE CONCENTRATIONS IN GROUNDWATER (APR. 2000-OCT. 2002)

Well	October 16-17, 2001	January 21-23, 2002	April 8-10, 2002	May 1, 2002	July 17-19, 2002	October 15-17, 2002
MW1	<0.30	<0.30	<0.30	-	<0.15	<0.15
MW10	9.6/8.8	2.6/2.7	8.6/8.5	-	6.4	6.8
MW12S	1.4	1.4	1.4	-	1.8	1.7
MW12D	-	-	6.0	-	-	-
MW13	<0.30	<0.30	<0.30	-	<0.15	<0.15
MW15	0.83	1.3	1.9	-	1.3	0.59
MW23	-	-	61.7	-	-	-
MW25	14.0	9.0	6.4	-	4.1	3.4
B31 (MW27)	13.0	11.1	10.8	-	1.8	6.6
B32 (MW28)	-	-	13.7	-	-	-
B53	-	-	6.2	-	-	-
B54	-	-	87.4	-	-	-
B59	1.3	1.3	0.90	-	0.60	<0.15
B66	-	-	41.0	-	-	-
B70A	-	-	<0.30	-	-	-
B71	-	-	0.47	-	-	-
MW75	<0.30	<0.30/<0.30	<0.30/<0.30	<0.30	<0.15/<0.15	<0.15/<0.15
MW76	0.42	<0.30	0.45	0.41	<0.15	<0.15
MW77	2.8	2.5	2.3	2.2	2.5	1.9
MW78	1.2	1.4	1.3	1.2	1.6	1.0
MW79A	3.1	3.8	3.8	4.3	6.0	3.7
MW80	<0.30	<0.30	<0.30	-	<0.15	<0.15
MW81	0.38	0.48	0.47	-	0.62	0.53
GAC Influent	15.0	11.0	11.0	-	8.7	7.6
GAC Effluent	<0.49	<0.49	<0.26	-	<0.26	<0.26
GAC Mid-Vessel	<0.49	<0.49	<0.26	-	1.0	<0.26

Notes:

All samples analyzed by USEPA Method 624, 601 or 502.2/524.2.

All concentrations are presented in micrograms per liter (mg/l).

- = Not analyzed

Values in **bold font** exceed the site specific Groundwater Quality Criteria for TCE (1.0 mg/l).

Table 1, Section 5 Continued...

Well	April 10-11, 2000	July 10-12, 2000	October 16-17, 2000	January 22-24, 2001	April 16-18, 2001	July 23-25, 2001
MW1	<0.20	< 0.27	< 0.27	< 0.30	< 0.30	<0.30
MW10	7.1/7.2	7.7/8	5.2	11.5	10.7	11.6/12.0
MW12S	1.8	1.7	1.5	1.7	1.5	1.8
MW12D	4.1	-	-	-	5.3	-
MW13	0.89	0.76	0.57	0.34	0.63	<0.30
MW15	< 0.20	1.3	1.4	1.8	1.9	1.2
MW23	9.5	-	-	-	110	-
MW25	15.60	20.50	29.70	28.8	22.9	17.6
B31 (MW27)	7.9	6.3	5.1	9.1	15.4	15.7
B32 (MW28)	13.3	-	-	-	14.4	-
B53	7.0	-	-	-	3.8	-
B54	106.0	-	-	-	195	-
B59	22.8	10.2	5.3	5.2	4.6	2.2
B66	24.4	-	-	-	28.9	-
B70A	-	-	-	-	-	-
B71	9.1	-	-	-	1.9	-
MW75	<0.20	< 0.27	< 0.27	< 0.30	< 0.30	<0.30
MW76	0.43	< 0.27	< 0.27	0.50	0.46	0.46
MW77	2.30	3.00	2.80	2.8	2.8	2.9
MW78	0.74	0.63	0.91	1.20	0.97	1.2
MW79A	1.30	1.80	2.60	1.0	2.8	2.9
MW80	< 0.20	< 0.27	< 0.27	< 0.30	< 0.30	<0.30
MW81	1.20	0.52	< 0.27	1.1	1.2	0.61
GAC Influent	26	19	17	3.58	14.0	16.0
GAC Effluent	< 0.28	< 0.28	< 0.28	< 0.28	0.60	< 0.49
GAC Mid-Vessel	< 0.28	< 0.28	< 0.28	< 0.28	< 0.49	< 0.49

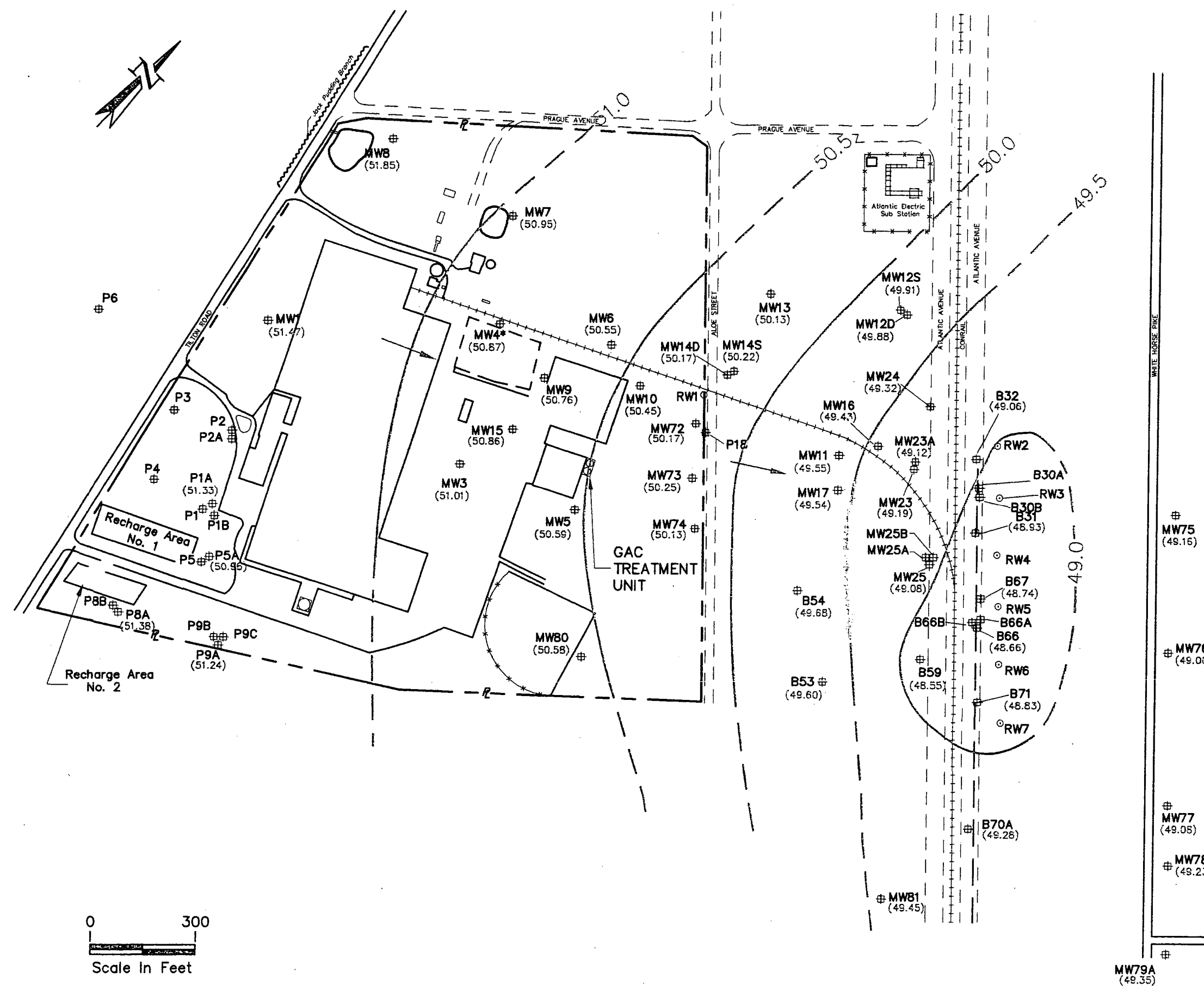
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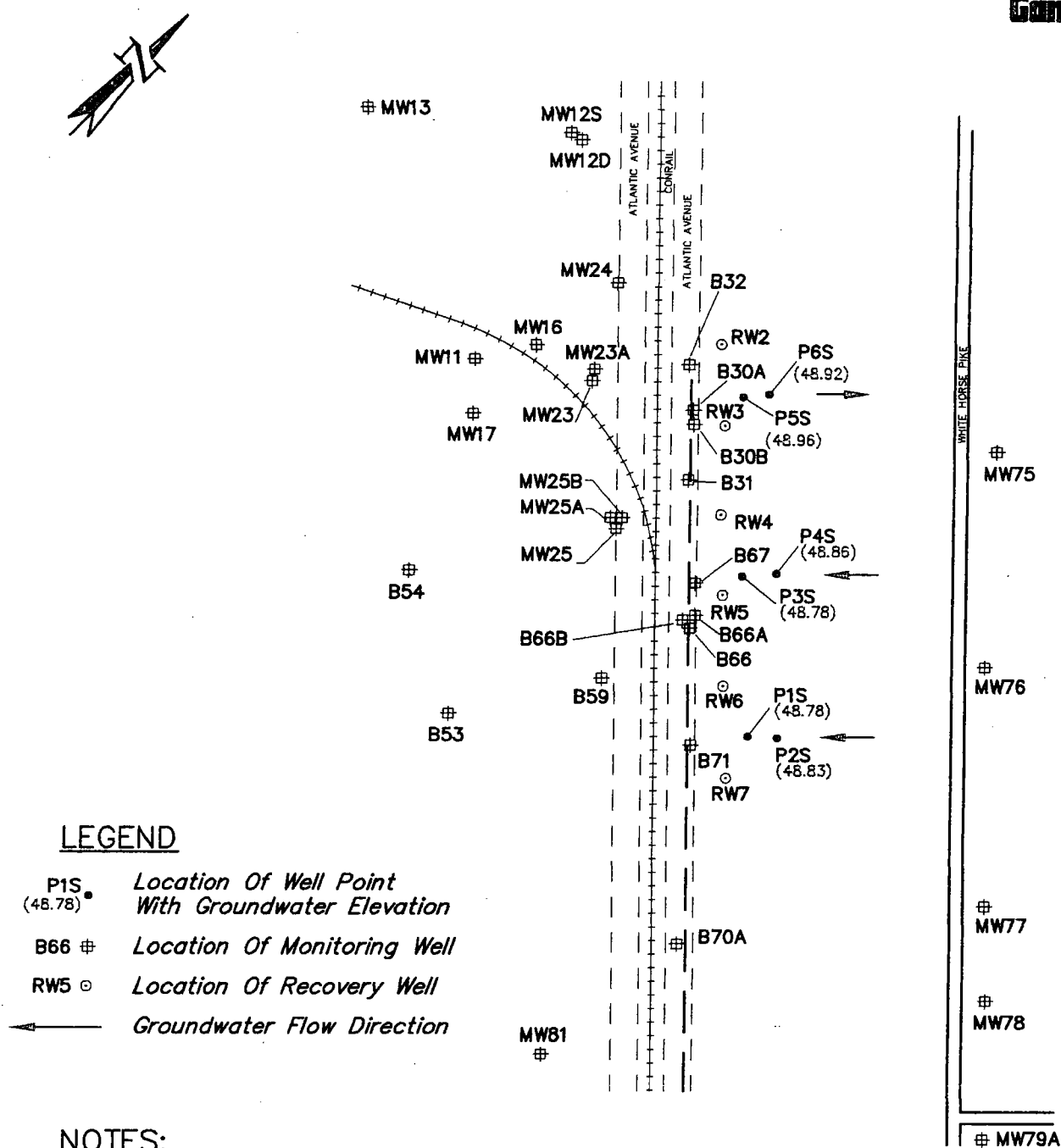
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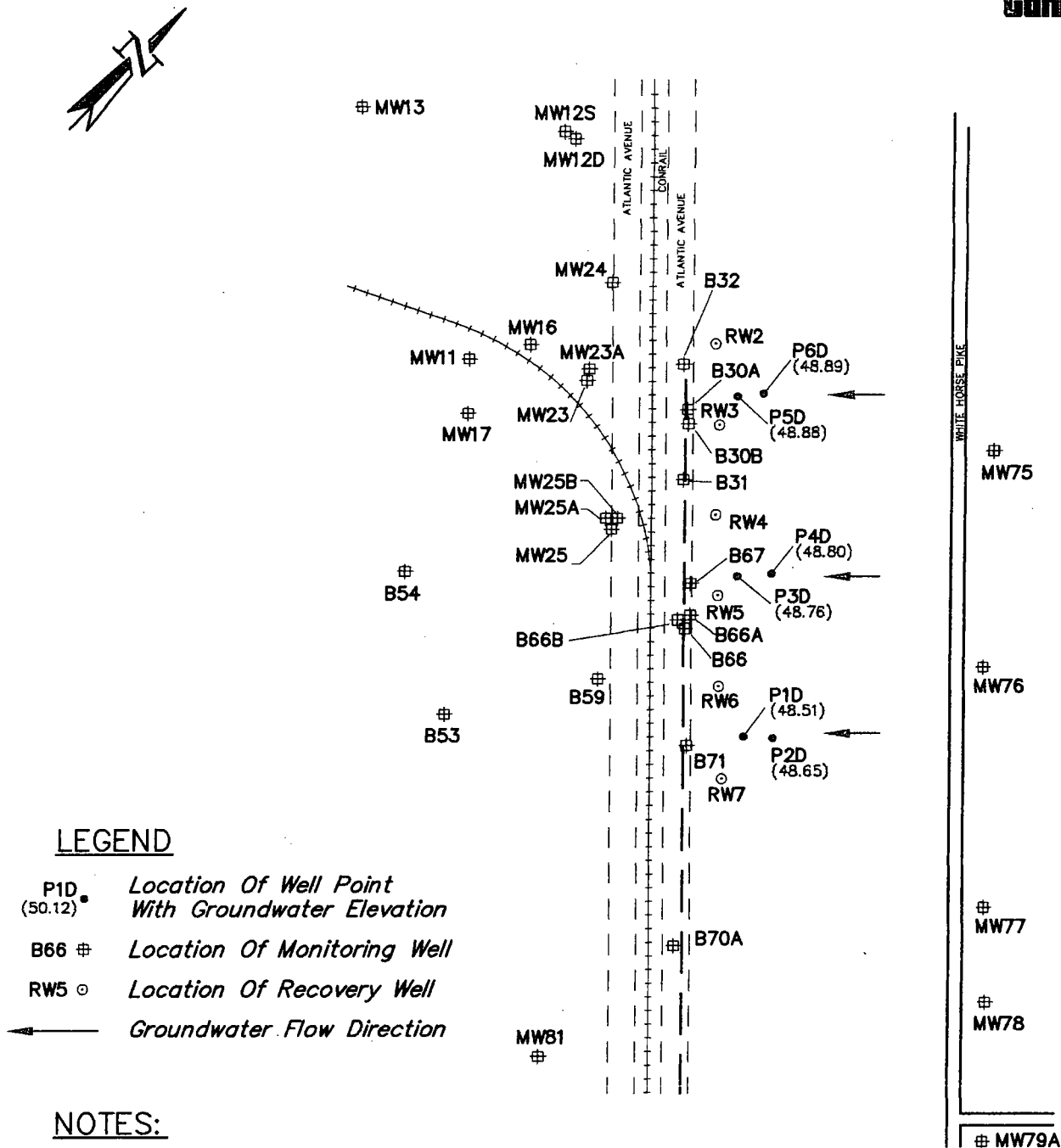


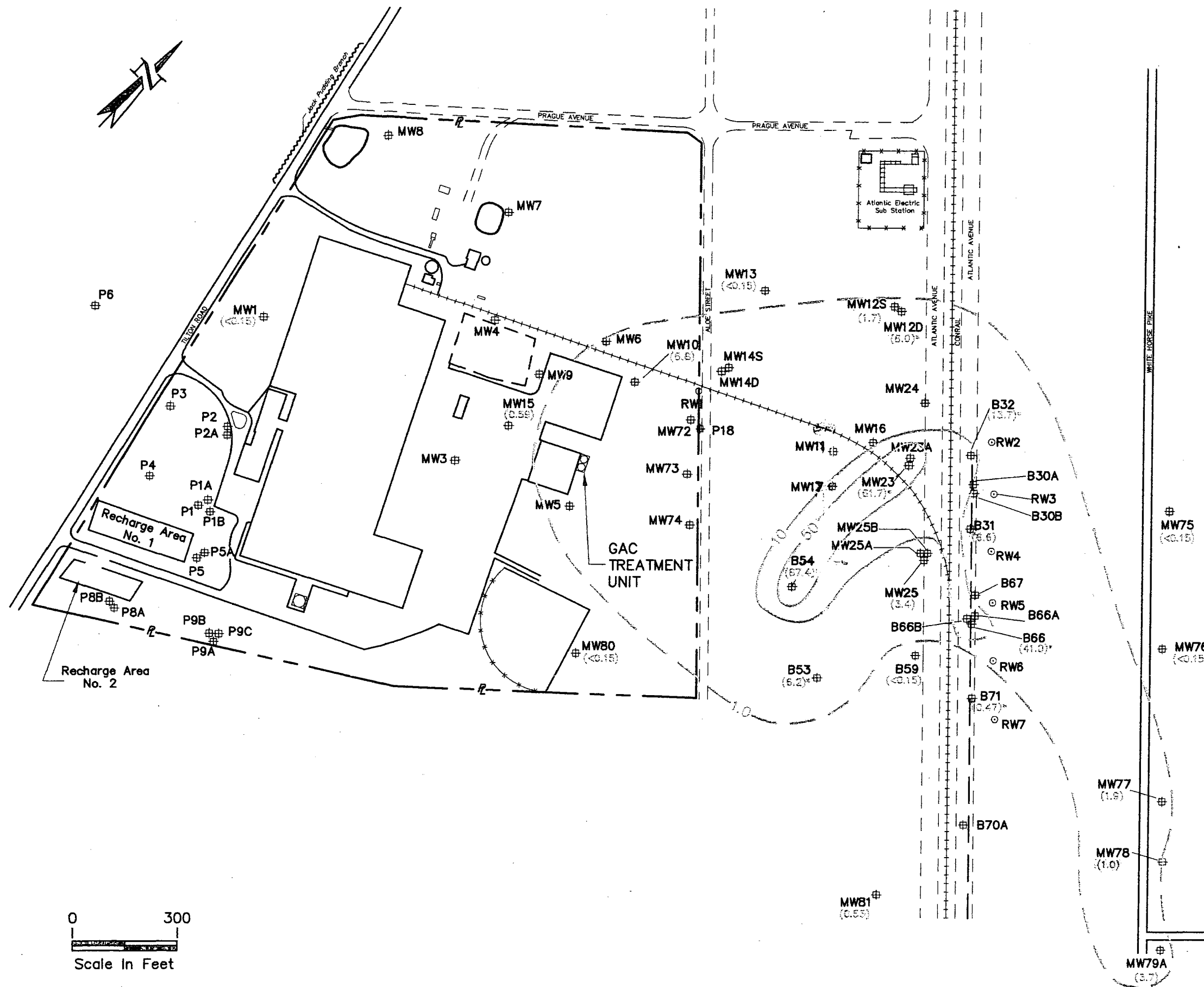
GROUNDWATER FLOW MAP

SHALLOW WELLS

OCTOBER 14, 2002

LENOX CHINA
POMONA, NEW JERSEY





LEGEND

- B59 # Location Of Monitoring Well With TCE Concentration in ug/l (<0.15)
- RW5 ○ Location Of Recovery Well
- 1.0 — Line Of Equal TCE Concentration in ug/l (Dashed Where Inferred)

NOTE:

Base Map Obtained From Geraghty & Miller's August 1992 Groundwater Monitoring Report.

* - Indicates results from April 2002 Sampling Event

0 300
Scale In Feet

120202
35221PCF

EXTENT OF TRICHLOROETHYLENE IN GROUNDWATER OCTOBER 14-17, 2002

LENOX CHINA
POMONA, NEW JERSEY